Abstract

A filter construction for use in a disk drive enclosure. The filter construction includes a first portion that removes or reduces contaminants entering the disk drive enclosure from the external atmosphere; the filter construction further includes a second portion that removes or reduces contaminants present within the disk drive enclosure. In one embodiment, the first portion has a diffusion channel in airflow communication with a port extending to the exterior of the enclosure, and may include an adsorbent filter or element. Air exits the first portion in an area of the disk drive enclosure having a low air pressure. The second portion has an adsorbent filter, such as a recirculation filter, which allows air or gas to flow therethrough with little resistance. The filter construction has an exit positioned approximately parallel to the periphery of a disk in the disk drive enclosure, so that air exiting the filter construction is generally perpendicular to the air currents produced by the spinning disk.

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